

**NORTH CHARLESTON SEWER DISTRICT
JOB DESCRIPTION, OCTOBER 2014**

**JOB TITLE: SYSTEMS MAINTENANCE MECHANICAL SPECIALIST
SYSTEMS MAINTENANCE DEPARTMENT**

GENERAL STATEMENT OF JOB

Under limited supervision, performs complex duties in the operation, installation, maintenance, and repair of mechanical equipment and related systems. Reports to the System Maintenance Assistant Supervisor.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

This job description in no way states or implies that these are the only duties to be performed by the employee occupying this position. Employees will be required to follow other job-related instructions and to perform any other job-related duties requested by their supervisor.

Operates, installs, maintains, troubleshoots, repairs, refurbishes, and replaces wastewater lift station mechanical machinery, parts and equipment that includes but is not limited to; pumps, grinders, miscellaneous valves, check valves, piping, various fasteners, and pipe support systems/equipment.

Conducts routine inspection and predictive/preventive maintenance and non-routine corrective/repair/rehabilitation maintenance for the following; force main pipe, vaults and manholes; associated relief valves, vaults, and related appurtenances.

Maintains wastewater lift stations through daily, weekly, and monthly inspection and housekeeping duties as follows but is not limited to; the cleaning of rags, grease, sludge, grit, and other debris lines and piping; from wet wells; from pumps, pump motors/motor leads, pump guiderails, pump bases and associated lifting chain and other appurtenances; immersible grinders, grinder frames, grinder a/c and hydraulic motors; bar screens, gates, valves, check valves, air release/vacuum breaker/combo valves; from sump pits and related appurtenances; sweeping, scrubbing mopping and wiping down of facility walls, doors, floors, panels, enclosures and related appurtenances; pressure washing and painting; etc.

Operates various specialized tools, power tools and meters that include but is not limited to; infrared and/or vibration test equipment; multi-meters, megohm-meters, amp meters, and voltage testers; pneumatic impact wrenches, grinders, saws, paint application equipment and related air driven tools while performing predictive, preventive and corrective maintenance on mechanical machinery, equipment, general fixtures as well as electrical equipment and systems as an electricians helper; bottle jacks; pipe fusing equipment and related appurtenances; multi-gas monitors; etc. Operates

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various hand tools and equipment which includes but is not limited to; screwdrivers, strippers, wrenches, ratchets, nut drivers, saws, vice, press, drill press, etc.; a variety of supplies such as nuts, bolts, screws, miscellaneous fasteners, pipe, hydraulic/lubricant oils/grease, paint, paint brushes, paint pans, silicone, gaskets, seals, general office supplies, etc.

Installs and removes submersible and dry pit submersible pumps through the operation of overhead hoists, cranes, come-alongs, chain lifts and boom trucks safely and knowledgeably utilizing straps, cables, shackles; etc..

Utilizes a variety of safety related tools and equipment as follows but not limited to; tripods, winches, self-retracting lifelines, harnesses and lanyards, various hoists/lifts; lock out/tag out devices and equipment; arc flash protection gear and tools, various personal protective devices and equipment per OSHA rules and guidelines, gas monitors and related appurtenances; fresh air blowers, fans; various traffic control devices and equipment, etc.

Assists Supervisor and Assistant Supervisor in the planning and initiation of special projects such as small, medium, and large lift station upgrades; force main upgrades; and miscellaneous pump station improvements.

Operates light and medium duty trucks and service vans for transport of personnel, trailers, portable trailered equipment, miscellaneous parts, fluids, and for purpose of inspection.

Responds to lift station emergencies after normal working hours, during weekends and holidays as assigned.

Maintains inventory performing various counts and inspections for the following but not limited to; power tools, hand tools, shop tools, various meters and testing devices, pneumatic tools, lifting straps, slings, cables, chains and miscellaneous safety gear, etc.

Assists Supervisor and Assistant Supervisor in the provision of standard operating and troubleshooting procedures for new personnel.

Performs duties to assist personnel as follows but is not limited to; in a role of Electrical Specialist and Electrical Technicians Assistant in order to assist in the performance of predictive, preventive and corrective maintenance work; in a role of interim telemetry system monitor and dispatcher for personnel in the absence of the department Administrative Assistant; in a support role for all Specialists and Technician positions within the department in order to assist in the performance of predictive, preventive and corrective maintenance work; within the limitations of training, knowledge level and abilities.

Performs confined space entries in wet wells, dry wells, and can stations requiring utilization of ladders, tripods and other various means of entry and fall protection.

Maintains department vehicles through inspections, housekeeping, and minor maintenance i.e.; washing and cleaning of exterior and interior; applying air to tires and/or filling/topping off of fluids, etc.

Performs minor carpentry work as follows; fabricates wood frames, mounts, and/or items necessary for lift stations/shop and/or other needs through use of various carpentry tools and procedures.

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Performs metal fabrication work through utilization of welding, riveting, soldering/sweating and/or pressing equipment and procedures.

Receives and/or reviews various records and reports such as predictive, preventive and /corrective maintenance work orders, standard operating procedures, safety regulations and procedure manuals, pump operations and run reports, equipment and systems hour meters, level monitoring gages and meters and various technical meters/monitors.

Prepares and/or processes various types of records and reports which include but is not limited to; daily lift station activity logs, predictive maintenance work orders, preventive maintenance orders, corrective maintenance orders, as well as confined space permits and related logs, hot work permits and related logs, lock out/tag out forms and related logs, atmospheric test logs, safety inspection logs, inventory forms, and training documents.

Refers to available training, standard operating procedures, safety manuals, technical/troubleshooting manuals, maintenance work orders, preventive maintenance work orders, corrective maintenance work orders, millwrights and mechanic's guides, pipe fitters handbooks and manuals, electrical handbooks, , codes / laws / regulations, publications and reference texts, policy and procedure manuals, and on-line sources of information, etc. in order to efficiently and effectively perform duties.

Uses a variety of computer software.

Interacts and communicates frequently with various groups and individuals and members of the general public; interacts and communicates infrequently with Pretreatment and Capital Projects department personnel.

ADDITIONAL JOB FUNCTIONS

Performs other duties as assigned.

MINIMUM TRAINING AND EXPERIENCE

Requires a high school diploma or GED equivalent supplemented by two to three years' experience in mechanical maintenance work in the water/wastewater and/or industrial maintenance fields; or any equivalent combination of training and experience which provides the required skills, knowledge and abilities. Must have a valid South Carolina driver's license.

SPECIAL REQUIREMENTS

Must have a valid South Carolina Class "B" CDL driver's license or be able to acquire one within one year (12 months) of hire date. Must be a Certified Boom Truck Operator and Rigger or be able to acquire certification within 1.5 years (18 months) of hire date. Must have or be able to obtain a "B" level WEASC Wastewater Collections certification within two years (24 months) of hire date. Must have or be able to obtain and Industrial Maintenance Mechanic Certificate in Applied Science within 3 years (36 months).

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MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Must be physically able to operate a variety of machinery and equipment including motor vehicles, numerous pumps, tractors, lawn mowers, generators, water pumps, etc., and electrician's and mechanic's hand tools. Must be able to exert up to 100 lbs. of force on a limited basis, 75 lbs. of force on a consistent and/or reoccurring basis and 25 lbs. frequently; and/or a negligible amount of force constantly to move objects. Physical demand requirements are those of Medium to Heavy Work.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, structural or compositional characteristics (whether similar or divergent from obvious standards) of data, people or things.

Interpersonal Communication: Requires the ability of speaking and/or signaling people to convey or exchange information. Includes receiving instructions, assignments or directions from superiors.

Language Ability: Requires the ability to read a variety of work orders, reports, correspondence, etc. Requires the ability to prepare work orders, correspondence, reports, forms, etc., using prescribed formats. Requires the ability to speak with poise, voice control and confidence.

Intelligence: Requires the ability to apply principles of rational systems to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists; to interpret a variety of instructions furnished in oral, written, diagrammatic or schedule form. Requires the ability to learn and understand relatively complex principles and techniques; to make independent judgments in absence of supervision; to acquire knowledge of topics related to primary occupation. Must have the ability to comprehend and interpret received information.

Verbal Aptitude: Requires the ability to record and deliver information, to follow and give verbal and written instructions; to teach employees. Must be able to communicate effectively and efficiently with supervision, co-workers and the general public.

Numerical Aptitude: Requires the ability to add and subtract totals, to multiply and divide, to determine percentages and decimals and to determine time. Must be able to use practical applications of fractions, percentages, ratio and proportion.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes in using shop equipment; to operate motor vehicles.

Manual Dexterity: Requires the ability to handle a variety of items, control knobs, switches, hand and power tools, measuring devices, etc. Must have significant levels of eye/hand/foot coordination. Must have the ability to utilize ladders and related ladder equipment.

Color Discrimination and Visual Acuity: Requires the ability to differentiate colors and shades of color; requires the visual acuity to determine depth perception, night vision, peripheral vision, inspection for small parts; preparing and analyzing written or computer data, etc.

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Interpersonal Temperament: Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under tight deadlines and when confronted with emergency situations.

Physical Communication: Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear.)

PERFORMANCE INDICATORS

Knowledge of Work: Has thorough knowledge of the methods, procedures and policies of the Systems Maintenance Department as they pertain to the performance of duties of the Systems Maintenance Mechanical Specialist. Has knowledge of the laws, ordinances, standards and regulations pertaining to the specific duties and responsibilities of the position. Has considerable knowledge of tools and equipment of mechanical trades. Has considerable knowledge of occupational hazards involved and safety precautions necessary for maintenance activities. Has considerable knowledge of sewer related equipment. Is skilled in the use of various trades and craft tools and equipment. Has working knowledge of the principles of electrical, mechanical and hydraulic maintenance equipment applicable to systems. Has working knowledge of the common practices, tools, methods, and techniques used in the electrical and mechanical maintenance, carpentry, and plumbing trades. Has general knowledge of the occupational hazards and proper safety precautions involved in operations. Has knowledge of the principles of the operation of pumps, motors and related treatment plant equipment. Is skilled in the use and care of common tools and equipment employed in the mechanical maintenance and installation, carpentry and plumbing trades. Is able to operate machinery used in mechanical and landscape maintenance. Is able to detect and repair malfunctions in mechanical and electrical equipment. Is able to understand and follow oral and written instructions. Is able to prepare and maintain simple records. Is able to perform physical labor for extended periods of time, possibly under arduous conditions. Is able to establish and maintain effective working relationships as necessitated by work assignments.

Quality of Work: Maintains high standards of accuracy in exercising duties and responsibilities. Exercises immediate remedial action to correct any quality deficiencies that occur in areas of responsibility. Maintains high quality communication and interaction with internal and external entities with whom the position interacts.

Quantity of Work: Maintains effective and efficient output of all duties and responsibilities as described under "Specific Duties and Responsibilities."

Dependability: Assumes responsibility for completing assigned work. Completes assigned work within deadlines in accordance with directives, policy, standards and prescribed procedures. Maintains accountability for assigned responsibilities in the technical, human and conceptual areas.

Attendance: Attends and remains at work regularly and adheres to policies and procedures regarding absenteeism and tardiness. Provides adequate notice to upper management with respect to leave requests.

Initiative and Enthusiasm: Maintains an enthusiastic, self-reliant and self-starting approach to meet job responsibilities and accountabilities. Strives to anticipate work to be accomplished, and initiates proper and acceptable action for the completion of work with a minimum of supervision and instruction.

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Judgment: Exercises analytical judgment in areas of responsibility. Identifies issues or situations as they occur and specifies decision objectives. Identifies or assists in identifying alternative solutions to issues or situations. Implements decisions in accordance with prescribed and effective policies and procedures and with a minimum of errors. Seeks expert or experienced advice where appropriate and researches issues, situations and alternatives before exercising judgment.

Cooperation: Accepts supervisory instruction and direction and strives to meet the goals and objectives of same. Questions such instruction and direction when clarification of results or consequences are justified, i.e., poor communications, variance with established policies or procedures, etc. Offers suggestions and recommendations to encourage and improve cooperation intra- and inter-departmentally.

Relationships with Others: Shares knowledge with managers, supervisors and co-workers for mutual benefit. Contributes to maintaining high morale among all employees. Develops and maintains cooperative and courteous relationships inter- and intra-departmentally, and with external entities with whom the position interacts. Tactfully and effectively handles requests, suggestions and complaints in order to establish and maintain good will. Emphasizes the importance of maintaining a positive image.

Coordination of Work: Plans and organizes daily work routine. Establishes priorities for the completion of work in accordance with sound time-management methodology. Avoids duplication of effort. Estimates expected time of completion of work elements and establishes a personal schedule accordingly. Attends required meetings, planning sessions and discussions on time. Implements work activity in accordance with priorities and estimated schedules.

Safety and Housekeeping: Adheres to all established safety and housekeeping standards. Ensures such standards are not violated.

DISCLAIMER: This job description is not an employment agreement or contract. Management has the exclusive right to alter this job description at any time without notice.